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Nota di contenuto	PART I: NOVEL TECHNOLOGIES IN FOOD PROCESSING -- 1. Emerging Novel Technologies for Food Drying -- 2. Foods and Food Products: Significance and Applications of Collegative Properties -- 3. Scope of Three-Dimensional Printing for Fabrication of Foods -- 4. Sustainable Renewable Energy Sources for Food and Dairy Processing -- PART II: RECENT TRENDS IN FOOD QUALITY AND MANAGEMENT -- 5. Applications of Edible Coatings to Extend Shelf-life of Fresh Fruits -- 6. Food Processing and Management of Food Supply Chain: From Farm to Fork -- 7. Microplastics in Foods: An Emerging Food Safety Threat -- 8. Scope of Genetically Engineered Organisms: Food Science and Pest Management Strategy -- 9. Diverse Bioengineering Tools for Crop

Improvement -- PART III: INNOVATIONS IN FOOD PACKAGING -- 10. New-age Packaging for Foods and Food Products -- 11. Biodegradable Packaging: Recent Advances and Applications in Food Industry -- 12. Recent Trends in Biodegradable Packaging of Foods -- 13. Scope of Herbal Extracts and Essential Oils for Extension of Shelf-life of Packaged Foods -- PART IV: POTENTIAL OF NANOMATERIALS IN FOOD PACKAGING -- 14. Engineered Nanomaterials in Food Packaging: Synthesis, Safety Issues and Assessment -- 15. Nanomaterials in Foods: Recent Advances, Applications and Safety -- PART V: NANOTECHNOLOGY APPLICATIONS IN FOOD TECHNOLOGY -- 16. Scope of Nanotechnology in Food Science and Food Engineering -- 17. Scope of Nanoencapsulation for Delivery of Functional Food Ingredients -- 18. Scope of Nanotechnology for Sustainable Production of Nutritive Foods -- PART VI: FOOD SCIENCE AND NUTRITIONAL RESEARCH FOR HUMAN HEALTH -- 19. Bioaccessibility and Bioavailability of Phenolics in Grapes and Grape Products -- 20. Recent Developments for Formulation of Infant Foods -- 21. Fermented Vigna Mungo and Carrot Pomace Cookies using Lactobacillus Casei -- 22. Role of Probiotics in Gut Micro-Flora -- 23. Screening and Isolation of Probiotic Cultures -- 24. Metabolomics Applications in Food Science and Nutritional Research.

Sommario/riassunto

This book focuses on novel technologies related to food processing technology and engineering. It also focuses on food safety, quality and management, the scope of the Internet of Things (IoT) in food processing and its management, bioengineering tools for crop improvement in agriculture, recent innovations in food packaging, nanotechnology in food processing, and the nutritional health benefits of food. 3D printed food, an interesting and increasingly popular concept among the public today, is a meal prepared through an automated additive process using 3D food printers. This book is a ready reference for food researchers, students, and industry professionals. The book updates the current scenario of food processing technology and engineering for readers from agriculture and its allied fields including students and researchers of food science and technology, dairy science and technology, packaging industry, people working in food safety organisations, and researchers in the field of nanotechnology.
